

Fertility in Adults with Pediatric-Onset Spinal Cord Injury



Lawrence C. Vogel, MD

Kathy Zebracki, PhD

Kathleen M Chlan, BA

Shriners Hospitals for Children, Chicago

Rush Medical College, Chicago

Rosalind Franklin University

of Medicine and Science

Background

- Having children is an important milestone of adulthood
- Little is known about relationship of fertility with medical and psychosocial outcomes in adults with pediatric-onset SCI
- Objective of the study
 - describe fertility among adults with pediatric-onset SCI
 - Examine associations between having children and demographic and injury-related factors, emotional functioning, participation, and life satisfaction.

Methods



- Cross-sectional design
- Annual survey of individuals who sustained a SCI prior to age 19 years (M=13.8)
- Demographic and medical questionnaires
- Standardized measures
 - CHART
 - SF12
 - PHQ-9
 - SWLS

Results

- N = 479
- Age at injury 0-18 years (M=13.8, SD=4.4).
- Age at follow-up 19-50 years (M=31.5, SD=6.2)
- Injury duration 1-43 years (M=17.2, SD=7.1)
- Males 63%
- Tetraplegia 54%

Results



21% (100/479) had children

- 12% (36/301) of males
- 36% (64/178) of females
- 26% (57/220) of those with paraplegia
- 17% (43/259) of those with tetraplegia

Results



- 19-24yrs 10% (5/50)
- 25-29yrs 15% (24/160)
- 30-34yrs 24% (31/127)
- 35-39yrs 28% (25/89)
- 40+yrs 28% (15/53)

Factors predictive of having children

- Females ($p < .001$; $\chi^2 = 39.99$)
 - 36% v. 12%
- Those with paraplegia ($p = .013$; $\chi^2 = 6.238$)
 - 26% v. 17%
- Those who were older at follow-up ($p = .002$) were more likely to have children
- Factors not associated
 - race,
 - complete/incomplete
 - college degree

Factors associated with having children



- Having children was significantly associated with
 - higher life satisfaction (SWLS) ($p < .001$)
 - Greater participation
 - CHART social integration ($p < .001$)
 - CHART occupation ($p = .002$)

Factors not associated with having children



- Health-related quality of life (SF12)
- Depression (PHQ-9)
- CHART
 - Cognitive independence
 - Physical independence
 - Mobility
 - Economic self-sufficiency

Results



- A subsample of 46 were asked additional questions about fertility
- 83% (38/46) reported having 1-3 biological children
 - (37/38) being born after injury
- 13% (6/46) reported having step children
- 17% (8/46) reported having adopted children

Biological Children born after injury

- 24% (9/37) had fertility treatments
 - 8/16 (50%) males
 - 1/21 (5%) females
- Of women with biological children born after injury
 - 9/20 (45%) reported having pregnancy complications
 - 25% reported having complications in labor
 - 30% reported having complications with delivery

Post-injury Sexual Aids



- 21% (8/38) of those with biological children reported the use of sexual aids
 - lubricant
 - oral medication
 - injectables

Conclusions



- While U.S. general population data indicate a decline in general fertility rate, rates are significantly lower in adults with pediatric-onset SCI
- Having children is associated with positive psychological outcomes
- Consequently, rehabilitation efforts should focus on infertility as well as non-biological reasons for not having children, such as financial and environmental.